March 13, 2006

Peter Van Alyea
Redwood Oil Company
50 Professional Center Drive
Rohnert Park, CA 94928

Ground Water Monitoring Report
January 2006
Redwood Oil Service Station #101
4925 Sonoma Highway
Santa Rosa, California
ECM Project # 98-517-14

Dear Mr. Van Alyea:

This report provides the results of quarterly ground water monitoring at 4925 Sonoma Highway, Santa Rosa, California (Figure 1, Appendix A). On January 11, 2006, ECM personnel visited the site. Ground water elevations were measured and ground water samples were collected from the two monitoring wells (MW-2 and MW-3). The well locations are shown on Figure 2 (Appendix A).

Ground water levels were measured in the two monitoring wells. Free-phase hydrocarbons were not observed in either of the wells. Wellheads and well vaults were observed to be in good condition. Water level data is provided in Table 1 (Appendix B) and ground water elevations are provided on Figure 2 (Appendix A).

Ground water samples were forwarded under chain of custody record to Entech Analytical Labs, Inc., of Santa Clara, California for analysis. Analytical results for ground water are included in Table 2 (Appendix B). Ground water samples were collected in accordance with ECM Standard Operating Procedure - Ground Water Sampling (Appendix E).

The chain of custody document and laboratory analytical reports are included as Appendix C. The water sampling data sheets are included as Appendix D. Purge water and decon rinseate were transported to an ROC holding tank for proper disposal.

Analytical results for ground water samples collected during the January 2006 event were consistent with results from prior events for monitoring wells MW-2 and MW-3. Low to moderate concentrations of gasoline and BTEX compounds were detected in the samples from MW-2 and MW-3. A low concentration of MTBE was also detected in the sample from well MW-2.

Thank you for the opportunity to provide environmental services to you. Please call if you have any questions.

Sincerely,
ECM Group

David Hazard
Environmental Scientist

Chris Bramer
Professional Engineer #C048846

Appendices:
A - Figures
B - Tables
C - Chain of Custody and Laboratory Analytical Reports
D - Water Sampling Data Sheets
E - Standard Operating Procedure

cc: Jo Bentz, North Coast Regional Water Quality Control Board

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APPENDIX A

FIGURES

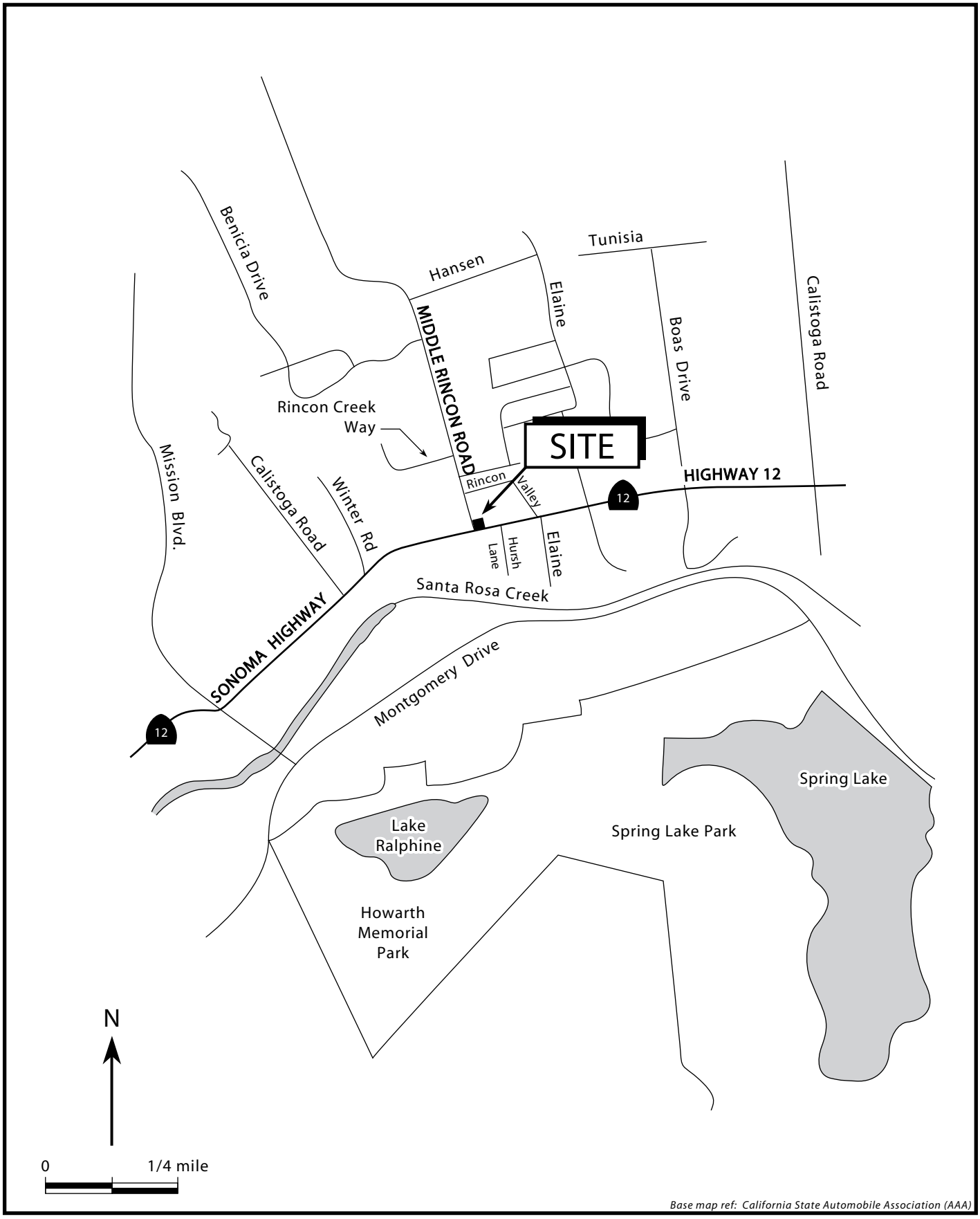

Figure 1. Site Location Map – Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

98-517 [Site Location map] 10-03

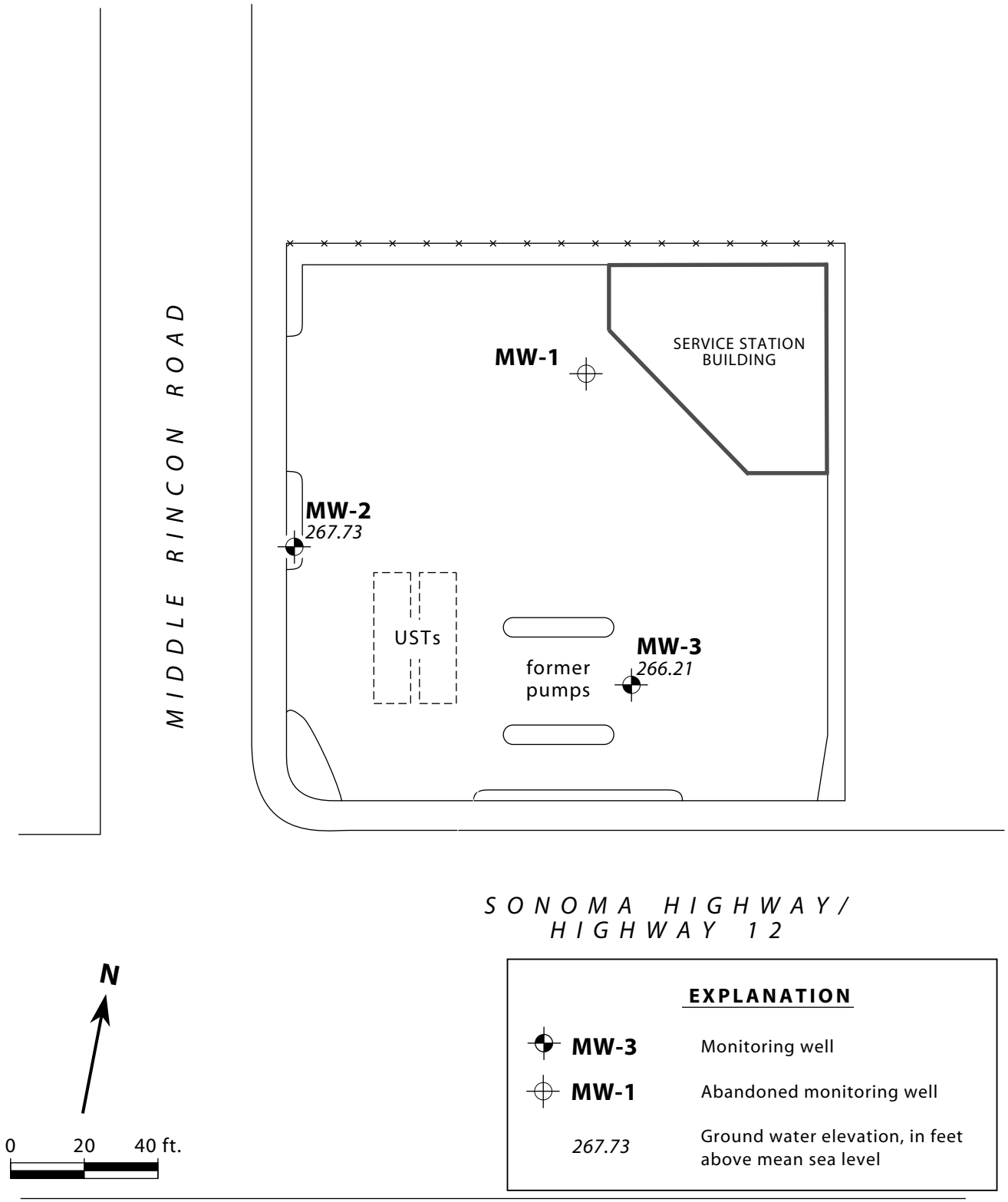

Figure 2. Monitoring Well Locations and Ground Water Elevations - January 11,2006 - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

98-517-14 [GWbase for dave] 3/13/06

APPENDIX B

TABLES

Table 1. Water Level Data and Well Construction Details - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite Grout Interval	Notes
MW-1	1/30/92	26.20	275.92	249.72	23 - 37	21 - 37	0 - 21	
	4/27/92	23.75		252.17				
	7/31/92	---		---				Monitoring well was inaccessible.
	10/27/92	---		---				Monitoring well was inaccessible.
	2/3/93	---		---				Monitoring well was inaccessible.
	4/28/93	---		---				Monitoring well was inaccessible.
	1/7/94	24.32		251.60				
	4/5/94	23.14		252.78				
	7/21/94	26.11		249.81				
	10/6/94	27.76		248.16				
	4/26/95	20.57		255.35				
	7/6/95	22.37		253.55				
	10/12/95	26.52		249.40				
	1/11/96	23.51		252.41				
	4/3/96	20.10		255.82				
	7/30/96	23.10		252.82				
	10/2/96	23.46		252.46				
	1/24/97	16.81		259.11				
	4/3/97	20.29		255.63				
	7/10/97	22.91		253.01				
	10/30/97	24.38		251.54				
	1/13/98	21.05		254.87				
	5/6/98	---		---				Monitoring well was inaccessible.
	7/1/98	20.46		255.46				
	10/5/98	24.30		251.62				
	4/5/99	16.61		259.31				
	10/7/99	25.48		250.44				
	4/17/00	19.20		256.72				
	10/24/00	26.28	275.93	249.65				Data from November 27, 2000 Earth Engineers report.
	5/25/01	---		---				Monitoring well was inaccessible.
	8/28/01	25.80		250.13				
	10/9/01	26.37		249.56				
	4/11/02	20.88	278.94	258.06				Resurveyed on December 8, 2001
	10/9/02	25.52		253.42				
	4/2/03	20.32		258.62				

Table 1. Water Level Data and Well Construction Details - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite Grout Interval	Notes
MW-1	10/15/03	24.86	278.94	254.08	23 - 37	21 - 37	0 - 21	
	1/5/04	19.56		259.38				
	4/22/04	20.41		258.53				
	10/6/04	24.94		254.00				Well abandoned on 10/9/04
MW-2	1/30/92	22.32	274.29	251.97	18 - 33	16 - 33	0 - 16	
	4/27/92	18.68		255.61				
	7/31/92	23.29		251.00				
	10/28/92	27.27		247.02				
	2/3/93	17.87		256.42				
	4/28/93	23.12		251.17				
	1/7/94	20.07		254.22				
	4/5/94	19.33		254.96				
	7/21/94	22.21		252.08				
	10/6/94	24.41		249.88				
	4/26/95	18.89		255.40				
	7/6/95	18.76		255.53				
	10/12/95	23.33		250.96				
	1/11/96	19.59		254.70				
	4/3/96	16.02		258.27				
	7/30/96	18.63		255.66				
	10/2/96	20.91		253.38				
	1/24/97	14.48		259.81				
	4/3/97	17.54		256.75				
	7/10/97	19.61		254.68				
	10/30/97	21.47		252.82				
	1/13/98	16.82		257.47				
	5/6/98	15.21		259.08				
	7/1/98	17.15		257.14				
	10/5/98	21.49		252.80				
	4/5/99	16.20		258.09				
	10/7/99	22.67		251.62				
	4/17/00	17.51		256.78				
	10/24/00	23.90	274.28	250.38				Data from November 27, 2000 Earth Engineers report.
	5/25/01	20.25		254.03				

Table 1. Water Level Data and Well Construction Details - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite Grout Interval	Notes
MW-2	8/28/01	22.17	274.28	252.11	18 - 33	16 - 33	0 - 16	
	10/9/01	26.10		248.18				
	4/11/02	17.25	277.31	260.06				Resurveyed on December 8, 2001
	10/9/02	23.30		254.01				
	4/2/03	14.75		262.56				
	10/15/03	26.79		250.52				
	1/5/04	15.37		261.94				
	4/22/04	17.19		260.12				
	10/6/04	23.52		253.79				
	4/19/05	19.93		257.38				
	10/14/05	16.70		260.61				
	1/11/06	**9.58**		**267.73**				
MW-3	1/30/92	29.06	278.62	249.56	25 - 40	23 - 40	0 - 23	
	4/27/92	24.78		253.84				
	7/31/92	29.18		249.44				
	10/28/92	30.90		247.72				
	2/3/93	24.77		253.85				
	4/28/93	17.62		261.00				
	1/7/94	25.85		252.77				
	4/5/94	24.20		254.42				
	7/21/94	25.81		252.81				
	10/6/94	29.86		248.76				
	4/26/95	20.37		258.25				
	7/6/95	22.41		256.21				
	10/12/95	27.92		250.70				
	1/11/96	26.06		252.56				
	4/3/96	22.11		256.51				
	7/30/96	24.44		254.18				
	10/2/96	24.14		254.48				
	1/24/97	21.46		257.16				
	4/3/97	21.09		257.53				
	7/10/97	23.31		255.31				
	10/30/97	24.62		254.00				
	1/13/98	25.00		253.62				

Table 1. Water Level Data and Well Construction Details - Redwood Oil Service Station #101, 4925 Sonoma Highway, Santa Rosa, California

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Screen Interval	Sand Pack Interval	Bentonite Grout Interval	Notes
MW-3	5/6/98	20.30	278.62	258.32	25 - 40	23 - 40	0 - 23	
	7/1/98	21.24		257.38				
	10/5/98	24.82		253.80				
	4/5/99	19.97		258.65				
	10/7/99	27.41		251.21				
	4/17/00	22.60		256.02				
	10/24/00	29.14		249.48				Data from November 27, 2000 Earth Engineers report.
	5/25/01	24.42		254.20				
	8/28/01	27.61		251.01				
	10/9/01	28.97		249.65				
	4/11/02	25.63	281.65	256.02				Monitoring well re-surveyed on December 8, 2001
	10/9/02	27.35		254.30				
	4/2/03	24.00		257.65				
	10/15/03	22.25		259.40				
	1/5/04	22.47		259.18				
	4/22/04	20.23		261.42				
	10/6/04	26.04		255.61				
	4/19/05	19.73		261.92				
	10/14/05	20.39		261.26				
	1/11/06	**15.44**		**266.21**				Well abandoned on 1/23/06

EXPLANATION:

DTW = Depth to Water
TOC = Top of Casing
GWE = Ground Water Elevation
msl = Measurement referenced relative to mean sea level

Top of casing elevations were surveyed by Ron Miller, Registered Engineer #15816, on February 12, 1992.
Top of casing elevations were re-surveyed by Bradley Thomas, PLS, Windsor Engineering & Land Surveying on June 19, 2000.

Table 2. Analytical Results for Groundwater - Redwood Oil Service Station #101 - 4925 Sonoma Highway, Santa Rosa, California

Sample ID	Date Sampled	TPPH (G)/ TPH(G)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	N	Notes
		<---------- ppb ---------->							
MW-1	1/30/92	<50	1.2	0.6	0.5	0.7	---	---	
	1/30/92	---	5	<5.0	<5.0	10	---	3,800	Sample analyzed for VOCs and Or Pb. Neither was detected. See lab report for detection limits.
	4/27/92	<50	<0.5	<0.5	<0.5	<0.5	---	5,800	
	7/31/92	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	10/27/92	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	2/3/93	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	4/28/93	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	1/7/94	<50	1	1.2	<0.5	0.7	---	6,600	
	7/21/94	<50	<0.5	<0.5	<0.5	<0.5	---	7,200	
	4/26/95	<50	<0.5	<0.5	<0.5	<0.5	---	5,700	
	10/12/95	97	0.7	0.6	<0.5	0.6	---	---	
	4/3/96	90	6	17	3	16	---	30,000	
	10/2/96	<50	<0.5	0.6	<0.5	0.8	<5.0	12,000	
	4/3/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	7,900	
	10/30/97	<50	<0.5	<0.5	<0.5	<0.5	<5.0	9,800	
	5/6/98	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	10/5/98	<50	<0.5	<0.5	<0.5	<1.0	<1.03	---	
	4/5/99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	---	
	10/7/99	<50	2.5	<0.5	<0.5	0.7	<0.5	---	
	4/17/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	
	10/24/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	This sampling event was performed by Earth Engineers. Data taken from November 27, 2000 Earth Engineers report.
	5/25/01	---	---	---	---	---	---	---	Monitoring well was inaccessible.
	8/28/01	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	Sample analyzed for diesel by EPA Method 8015. The result was 130 ppb.
	10/9/01	58	4.9	4.5	1.7	6.8	<5	---	
	4/11/02	110	10	7.8	2.4	18.8	<5	---	
	10/9/02	66	4.2	3.3	1.6	5	<5	---	
	4/2/03	<50	<0.5	<0.5	<0.5	<1	<1	---	
	10/15/03	<50	<0.5	<0.5	<0.5	<1	1.13	---	
	1/5/04	71	8.5	7.9	1.7	6.4	<1	---	
	4/22/04	190	11	26	3.2	36	13	---	
	10/6/04	<25	<0.5	<0.5	<0.5	<1	<1		Well abandoned on 10/9/04

Table 2. Analytical Results for Groundwater - Redwood Oil Service Station #101 - 4925 Sonoma Highway, Santa Rosa, California

Sample ID	Date Sampled	TPPH (G)/ TPH(G)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	N	Notes
		<---------- ppb ---------->							
MW-2	1/30/92	8,800	2,900	3.5	21	24	---	<30	Sample analyzed for VOCs and Or Pb. Neither was detected. See lab report for detection limits
	4/27/92	12,000	410	28	79	21	--	---	
	7/31/92	16,000	4,500	<25	33	49	---	---	
	10/27/92	15,000	7,100	<5.0	26	25	---	---	
	2/3/93	3,100	930	<5.0	18	9.4	---	---	
	4/28/93	7,600	4,200	82	73	80	---	---	
	1/7/94	19,000	7,300	76	220	140	---	<30	
	7/21/94	9,000	1,800	55	130	100	---	<30	
	4/26/95	9,700	4,500	64	130	86	---	<30	
	10/12/95	27,000	6,100	290	680	930	---	---	
	1/30/92	8,800	2,900	3.5	21	24	---	<30	Sample analyzed for VOCs and Or Pb. Neither was detected. See lab report for detection limits
	4/27/92	12,000	410	28	79	21	--	---	
	7/31/92	16,000	4,500	<25	33	49	---	---	
	10/27/92	15,000	7,100	<5.0	26	25	---	---	
	2/3/93	3,100	930	<5.0	18	9.4	---	---	
	4/28/93	7,600	4,200	82	73	80	---	---	
	1/7/94	19,000	7,300	76	220	140	---	<30	
	7/21/94	9,000	1,800	55	130	100	---	<30	
	4/26/95	9,700	4,500	64	130	86	---	<30	
	10/12/95	27,000	6,100	290	680	930	---	---	
	4/3/96	16,000	5,800	150	400	430	---	62	
	10/2/96	20,000	4,900	310	590	600	1,600	30	
	4/3/97	3,100	570	23	83	52	790	49	
	10/30/97	12,000	2,700	98	530	330	1,000	150	
	5/6/98	9,900	1,900	28	280	130	880	<100	
	10/5/98	6,100	98	89	<5.0	96	6203	---	
	4/5/99	220	42	<0.5	11	0.78	24	---	
	10/7/99	3,300	600	15	52	17	870	---	
	4/17/00	4,500	26	46	<0.5	1.8	180	---	
	10/24/00	480	4.4	<0.5	<0.5	<0.5	130	---	Sampling performed by Earth Engineers. Data taken from November 27, 2000 Earth Engineers report. Well was not purged prior to sample

Table 2. Analytical Results for Groundwater - Redwood Oil Service Station #101 - 4925 Sonoma Highway, Santa Rosa, California

Sample ID	Date Sampled	TPPH (G)/ TPH(G)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	N	Notes
		<---------- ppb ---------->							
MW-2	10/24/00	14,000	1,900	48	480	88	680	---	Sampling performed by Earth Engineers. Data taken from November 27, 2000 Earth Engineers report.
	5/25/01	980	82	1	22	13	130	---	
	10/9/01	4,400	630	18	23	53	6.5	---	
	4/11/02	120	8.4	6.9	3.1	19.8	18	---	
	10/9/02	50	6.6	5.6	2.8	9.2	<5	---	
	4/2/03	<50	<0.5	<0.5	<0.5	<1	2.7	---	
	10/15/03	<50	<0.5	<0.5	<0.5	<1	9.6	---	
	1/5/04	84	9.2	9	1.8	7.6	<1	---	
	4/22/04	350	19	46	5.7	69	11	---	
	10/6/04	<25	<0.5	<0.5	<0.5	<1	<1		
	4/19/05	<50	<0.5	<0.5	<0.5	<0.5	<1	---	
	10/14/05	240	17	4.0	1.5	73	<1.0	---	
	1/11/06	**220**	**32**	**30**	**5.0**	**24**	**1.1**	---	
MW-3	1/30/92	260	4.8	<0.5	<0.5	0.7	---	160	Sample analyzed for VOCs and Or Pb. Neither was detected. See lab report for detection limits
	4/27/92	3,400	220	<0.5	<0.5	8.2	---	270	
	7/31/92	6,500	340	<5.0	<5.0	<5.0	---	---	
	10/28/92	9,900	490	5.1	26	21	---	---	
	2/3/93	3,800	380	27	3.3	9.5	---	---	
	4/28/93	3,200	160	<0.5	<0.5	7	---	---	
	1/7/94	7,800	350	13	13	16	---	200	
	7/21/94	5,100	21	<5.0	<5.0	<5.0	--	<30	
	4/26/95	2,600	280	2.4	<0.5	4.6	---	50	
	10/12/95	2,600	210	9.1	3.2	4.1	---	----	
	4/3/96	2,300	200	24	29	38	---	470	
	10/2/96	5,600	94	1.2	2.8	3.8	<5.0	<30	
	4/3/97	1,900	36	8.2	2.1	10	28	63	
	10/30/97	3,900	54	<2.5	<2.5	<2.5	<25	130	
	5/6/98	3,200	56	<0.5	<0.5	<0.5	5	<100	
	10/5/98	3,700	28	<0.5	<0.5	<1.0	8	---	
	4/5/99	1,900	43	2.2	5	3.3	68	---	
	10/7/99	3,900	65	40	0.6	4.1	120	---	
	4/17/00	4,200	460	19	230	39	400	---	

Table 2. Analytical Results for Groundwater - Redwood Oil Service Station #101 - 4925 Sonoma Highway, Santa Rosa, California

Sample ID	Date Sampled	TPPH (G)/ TPH(G)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	N	Notes
		<---------- ppb ---------->							
MW-3	10/24/00	5,100	14	<0.5	<0.5	<0.5	12	---	Sampling performed by Earth Engineers. Data taken from November 27, 2000 Earth Engineers report. Well was not purged prior to sample.
	10/24/00	4,600	13	<0.5	<0.5	<0.5	11	---	Sampling performed by Earth Engineers. Data taken from November 27, 2000 Earth Engineers report.
	5/25/01	2,600	10	3.5	<0.5	1.8	8.2	---	
	10/9/01	1,300	39	6.3	3	7.2	<5	---	
	4/11/02	280	11	8.1	2.5	18.6	<5	---	
	10/9/02	55	4.7	3.7	1.8	5.8	<5	---	
	4/2/03	68	<0.5	<0.5	<0.5	<1	<1	---	
	10/15/03	830	9.2	<1	<1	<2	1.3	---	
	1/5/04	1,000	13	25	7.6	24	<1	---	
	4/22/04	1,100	10	20	2.6	28	10	---	
	10/6/04	60	<0.5	<0.5	<0.5	<1	<1		
	4/19/05	81	<0.5	<0.5	<0.5	<0.5	<1	---	
	10/14/05	220	5.6	5.1	1.8	8.7	1.1	---	
	1/11/06	**380**	**10**	**7.8**	**1.4**	**5.7**	**<1.0**	---	Well abandoned on 1/23/06
Orchard	10/24/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	
DW-62MRR	12/3/01	<50	<0.5	<0.5	<0.5	<0.5	<5	—	
DW Rincon	10/24/00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	---	
feed	12/3/01	<50	<0.5	<0.5	<0.5	<0.5	<5	---	

EXPLANATION:

TPH(G) = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl t-butyl ether
N = Nitrate as N
VOC = Volatile organic compound
OL= Organic Lead
DW-62 MRR = Domestic well located at 62 Middle Rincon Road, approximately 150 ft north of the site.
DW-Rincon feed = Water supply well located at Carter's Rincon Valley Feeds. Well is located approximately 100 ft west and 100 ft north of the site.
"Orchard well" is located approximately 325 ft west and 150 ft north of the site. It serves two residences located on Sonoma Highway.

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to: DAVE HAZARD	Phone No.: 707-751-0655	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: ECM GROUP	Fax No.: 707-751-0653	Project No.: 9%-517-14	Company: REDWOOD OIL CO.	Quote No.:	
Mailing Address: P.O. BOX 502	Email Address: ECMGRP@AOL.COM	Project Name: SONOMA MT	Billing Address: (If Different)		
City: SENECA	State: CA	Zip Code: 95410	Project Location:	City:	State: Zip:

Sampler: MIKE JACKSON | Field Org. Code:

Global ID:

Turn Around Time
- ☐ Same Day ☐ 1 Day
- ☐ 2 Day ☐ 3 Day
- ☐ 4 Day ☒ 10 Day ☐ 5 Day

Order ID: 47358

GC/MS Methods | GC Methods | General Chemistry

Client ID / Field Point	Lab. No.	Date	Time	Matrix	No. of Containers	EPA 8260B	BTEX ☒ MTBE ☐ TPH Gas ☒ by 8260B	5 Oxygenates (MTBE, TBA, ETBA, DIPE, TAME) ☒ by 8260B	Lead Scavengers (1,2-DCA & EDB) ☐ EPA 8260B	Base/Neutral/Acid Organics 8270C ☐ SIM ☐ 8270C SIM ☐	TPH Extractable (Diesel ☐ Motor Oil ☐ Other ☐) w/ Silica Gel Cleanup ☐	Pesticides 8081 ☐	PCB's 8082 ☐	TPH as Gas/BTEX ☐ MTBE ☐ by 8015M/8020	Methanol by 8015M	Remarks
MW-2	-001	11/11/06	14:15	W	4		X	X								
MW-3	-002	11/11/06	13:35	W	4		X	X								

Relinquished by:	Received By	Date	Time
		11/13/06	1018
Relinquished by:	Received by:	Date: 11/13/06	Time: 1150
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments

☐ EDD Report
☒ EDF Report

☐ Plating
☐ LUFT-5
☐ RCRA-8
☐ PPM-13
☐ CAM-17

Metals:
Al, As, Sb, Ba, Be, Bi, B, Cd, Ce, Ca, Cr, Co, Cs, Cu, Fe, Pb, Mg, Mn,
Ga, Ge, Hg, In, Li, Mo, Ni, P, K, Si, Ag, Na, S, Se, Sr, Ta, Te, Tl, Sn, Ti, Zn, V, W, Zr

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Dave Hazard
ECM Group
290 W. Channel Rd.
Benicia, CA 94510

Lab Certificate Number: 47358
Issued: 01/24/2006

Project Number: 98-517-14
Project Name: 4925 Sonoma Highway

Global ID: T0609700640

Certificate of Analysis - Final Report

On January 13, 2006, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix	Test	Comments
Liquid	Electronic Deliverables EPA 8260B - GC/MS TPH as Gasoline by GC/MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Samples Received: 01/13/2006

Project Number: 98-517-14
Project Name: 4925 Sonoma Highway

GlobalID: T0609700640

Sample Collected by: Client

Certificate of Analysis - Data Report

Lab # : 47358-001 **Sample ID:** MW-2 **Matrix:** Liquid **Sample Date:** 1/11/2006 2:15 PM

EPA 5030C EPA 8260B for Groundwater and Water EPA 624 for Wastewater — 8260Petroleum

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	32		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Toluene	30		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Ethyl Benzene	5.0		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Xylenes, Total	24		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Methyl-t-butyl Ether	1.1		1.0	1.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	1/18/2006	WM2060118
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	103	60 - 130
Dibromofluoromethane	95.1	60 - 130
Toluene-d8	101	60 - 130

Analyzed by: TAF
Reviewed by: MaiChiTu

EPA 5030C GC-MS — TPH as Gasoline - GC-MS

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	220		1.0	50	µg/L	N/A	N/A	1/18/2006	WM2060118

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94.6	60 - 130
Dibromofluoromethane	97.0	60 - 130
Toluene-d8	94.3	60 - 130

Analyzed by: TAF
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

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ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Samples Received: 01/13/2006

Project Number: 98-517-14
Project Name: 4925 Sonoma Highway

GlobalID: T0609700640

Sample Collected by: Client

Certificate of Analysis - Data Report

Lab # : 47358-002 **Sample ID:** MW-3 **Matrix:** Liquid **Sample Date:** 1/11/2006 1:55 PM

EPA 5030C EPA 8260B for Groundwater and Water EPA 624 for Wastewater — **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	10		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Toluene	7.8		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Ethyl Benzene	1.4		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Xylenes, Total	5.7		1.0	0.50	µg/L	N/A	N/A	1/18/2006	WM2060118
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	1/18/2006	WM2060118
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	1/18/2006	WM2060118

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	101	60 - 130
Dibromofluoromethane	98.6	60 - 130
Toluene-d8	100	60 - 130

Analyzed by: TAF
Reviewed by: MaiChiTu

EPA 5030C GC-MS — **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	380		1.0	50	µg/L	N/A	N/A	1/18/2006	WM2060118

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	93.0	60 - 130
Dibromofluoromethane	101	60 - 130
Toluene-d8	93.6	60 - 130

Analyzed by: TAF
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	102	60 - 130
Dibromofluoromethane	92.3	60 - 130
Toluene-d8	100	60 - 130

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	93.7	60 - 130
Dibromofluoromethane	94.2	60 - 130
Toluene-d8	94.0	60 - 130

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Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	16.1	µg/L	80.5	70 - 130
Benzene	<0.50	20	18.1	µg/L	90.6	70 - 130
Chlorobenzene	<0.50	20	19.7	µg/L	98.4	70 - 130
Methyl-t-butyl Ether	<1.0	20	17.0	µg/L	85.0	70 - 130
Toluene	<0.50	20	17.7	µg/L	88.6	70 - 130
Trichloroethene	<0.50	20	20.6	µg/L	103	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	104.0	60 - 130
Dibromofluoromethane	93.3	60 - 130
Toluene-d8	97.2	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	<0.50	20	16.6	µg/L	82.9	2.9	25.0	70 - 130
Benzene	<0.50	20	18.5	µg/L	92.5	2.1	25.0	70 - 130
Chlorobenzene	<0.50	20	20.1	µg/L	100	1.9	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	18.2	µg/L	90.9	6.7	25.0	70 - 130
Toluene	<0.50	20	17.9	µg/L	89.7	1.3	25.0	70 - 130
Trichloroethene	<0.50	20	21.8	µg/L	109	5.8	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	105.0	60 - 130
Dibromofluoromethane	93.1	60 - 130
Toluene-d8	97.7	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	250	269	µg/L	108	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	95.4	60 - 130
Dibromofluoromethane	95.5	60 - 130
Toluene-d8	93.7	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	250	265	µg/L	106	1.4	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	95.8	60 - 130
Dibromofluoromethane	94.7	60 - 130
Toluene-d8	94.4	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

MS Sample Spiked: 47377-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	0.261	20	20.3	µg/L	1/18/2006	100	70 - 130
Methyl-t-butyl Ether	ND	20	22.4	µg/L	1/18/2006	112	70 - 130
Toluene	ND	20	19.4	µg/L	1/18/2006	97.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	113.0	60 - 130
Dibromofluoromethane	110.0	60 - 130
Toluene-d8	101.0	60 - 130

MSD Sample Spiked: 47377-005

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	0.261	20	19.8	µg/L	1/18/2006	97.7	2.6	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	21.5	µg/L	1/18/2006	108	3.9	25.0	70 - 130
Toluene	ND	20	19.3	µg/L	1/18/2006	96.6	0.41	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	111.0	60 - 130
Dibromofluoromethane	111.0	60 - 130
Toluene-d8	103.0	60 - 130

APPENDIX D

WATER SAMPLING DATA SHEETS

APPENDIX D

WATER SAMPLING DATA SHEETS

WATER LEVEL & PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: SONOMA HY. 98-517-14

DATE: 1/11/06

BY: MSS

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-2			9.58	30.40	2"
MW-3			15.44	39.40	2"

WATER SAMPLING DATA

Job Name SONOMA HY. Job Number 98-517-14

Well Number MW-2 Date 1/11/06 Time

Well Diameter 2" Well Depth (spec.) Well Depth (sounded) 30.40

Depth to Water (static) 9.58 TOC elev.

G.W. Elev. Maximum Drawdown Limit (if applicable)

Initial height of water in casing 20.82 Volume 3.39 gallons

Total to be evacuated = 3 x Initial Volume 10.18 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_4" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft

Pumped or Bailed Dry? ___Yes X No After ____ gallons Recovery Rate

Water color Odor

Description of sediments or material in sample:

Additional Comments:

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	66.3	67.2	67.0				
pH	8.01	7.90	7.69				
EC (umhos/cm)	797	765	715				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

14:15

WATER SAMPLING DATA

Job Name SONOMA HY. Job Number 98-517-14

Well Number MW-3 Date 1/11/06 Time

Well Diameter 2" Well Depth (spec.) Well Depth (sounded) 39.40

Depth to Water (static) 15.44 TOC elev.

G.W. Elev. Maximum Drawdown Limit (if applicable)

Initial height of water in casing 23.96 Volume 3.90 gallons

Total to be evacuated = 3 x Initial Volume 11.71 gallons

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_{2}" casing = 0.163 gal/ft
V_{3}" casing = 0.367 gal/ft
V_{4}" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_{6}" casing = 1.47 gal/ft
Cum. Gal.

Stop Time	Start Time	Bailed	Pumped

Pumped or Bailed Dry? ___Yes X No After ____ gallons Recovery Rate

Water color Odor

Description of sediments or material in sample:

Additional Comments:

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	68.2	67.5	66.9				
pH	7.56	7.43	7.58				
EC (umhos/cm)	527	487	469				
Special Conditions							

SAMPLES COLLECTED

Sample ID	ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

13:55

APPENDIX E

ECM STANDARD OPERATING PROCEDURE

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed 10%).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4˚C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.